



QUALITY TRAINING FOR THE
LABORATORY COMMUNITY

“2003 NELAC Training Assessing Microbiology”

***September 26 & 27, 2005
North Chelmsford, MA***

***Instructor: Marlene Moore
Advanced Systems, Inc.***

***Course presented by Advanced Systems, Inc.
in cooperation with the Independent Laboratories Institute***

The Independent Laboratories Institute is the educational foundation affiliated with the American Council of Independent Laboratories. ACIL is the trade association of independent commercial engineering and scientific laboratory testing, consulting and R & D firms.

Advanced Systems conducts training for environmental sampling, quality control, laboratory operations and field operations and design Quality Systems based on the ISO 9000 Quality Standards, ISO 14000 series of Environmental Management Standards, and ISO/IEC 17025 Laboratory Quality and Technical Competence Standards.

TITLE

**2003 NELAC Technical Training
Assessing Microbiology****OBJECTIVES OF COURSE**

The principles for assessing specific technical disciplines within the laboratory operations are presented.

The rationale for assessing is based on proven quality principals that allow the determination of adherence to the defined system for the technical operations. The system standards used during this course are the 2003 NELAC standard.

NELAP assessors with a basic science background in the analysis of microbiology samples, conduct an assessment of a laboratory system and technical operations to assure conformance to the stated quality system and where applicable the mandated methods.

Personnel successfully completing the course will acquire the following:

- An understanding of the key elements of data packages, and raw data to review and check effectively, both in the analysis of samples and the proper operation of support equipment,
- Knowledge sufficient to assess the implementation of the technology
- An understanding as to how the technology is used in the various methods.

Technologies to be reviewed include:

- Chromofluorogenic
- Multiple Tube Fermentation
- Membrane Filtration
- Heterotrophic Plate Count
- Cryptosporidium, Giardia

COURSE AGENDA

Day 1, September 26, 2005

8:00 AM	Introductions
8:15 AM	Chapter 1: 2003 NELAC Standards Review standard Technical applications (Section 5.5)
9:00 AM	Chapter 2: Support Equipment & Reference Standards Procedure Records
11:00 AM	Chapter 3 Method Evaluation Initial Procedure Performance On-Going Demonstration
12:00 PM	Lunch (1 hour on your own)
1:00 PM	Chapter 3: Quality Control and Criteria Procedure Review Section 5.5.6 Essential QC Section 5.5.9 Microbiology Appendix D.3 Measurement Uncertainty Section 5.5.4
5:00 PM	Course Ends for Day

Day 2, September 27, 2005

8:00 AM	
8:30 AM	Chapter 4: Personnel and Initial Demonstration Demonstration of Capability On-Going Proficiency
10:00 AM	Chapter 5: Recordkeeping Section 5.4.12 Exercises in the evaluation of raw data to reported results Key information to document the reported results Ways to detect improper practices
11:00 AM	Chapter 5: Summary and Questions
12:00 PM	Lunch (1 hour on your own)
1:30 PM	Chapter 6: Final Examination Scoring
3:30 PM	Chapter 7: Wrap-up Review Examination Answers Evaluation Forms
5:00 PM	Course Ends

COURSE NOTES

Prerequisites for the training course are:

1. Basic knowledge of the technology, i.e. familiarity with the principles and application of the technology used by the laboratory for microbiology test methods.
2. An understanding of Quality Systems

Course starts promptly each day at 8:00 a.m.

Lunch is scheduled for 1 hour at noon each day.

Lunch is on your own.

Class ends each day at 5:00 p.m.

Students must stay until the end to complete the course.

Students should prepare for the final exam prior to attending the class and in the evening of day 1.

Students should read NELAC 2003 Chapters 1, 2, 3, 4, 5 and 6. Students are expected to be thoroughly familiar with the 2003 NELAC standards before arrival at the course.

Final Exam

You must obtain a 70% score to "successfully complete" the course. (NELAP assessors: You are required to have successfully completed at least one technical assessor-training course.)

All students receive a certificate of course attendance if attending both days of class and not successfully completing the test.

Students with test scores of greater than 70% receive a certificate of course completion.

At the present time NELAC does not approve training courses.

This course is not endorsed or approved by NELAC or NELAP. It is up to the accrediting authority to approve a technical assessor-training course in order to qualify its assessors.

This course was prepared in accordance with NELAC 2003 Standards for Technical Assessor Training, Chapter 3, Appendix B.

Location: EPA New England Regional Laboratory
11 Technology Drive
North Chelmsford, MA 01863-2431

Web site for Directions, hotel information: www.epa.gov/region01/directions/lab.html

REGISTRATION FEES

Sign up now.....

**Two Day Course
“2003 NELAC Technical Training Assessing
Microbiology”**

**\$645 Government Employees
ACIL Members**

\$845 All Others

**Please register online at
www.acil.org**